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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

GALLAGHER, J

ART UNIT

PAPER NUMBER

1733

DATE MAILED:

7
07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/649827

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 34-63 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 34-63 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on 23 APRIL 01 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

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1. Applicants' Preliminary Amendments (2), filed 29 August 2000 and 23 April 2001, have both been received and made of record. Further regarding the first filed of these amendments, the term ", the specification by reference." in line 2 of the continuing data can be deleted as being (a) unnecessary and/or redundant, in view of the inherent relationship between the instant application and its parent; and (b) improper (at least at this point), in that such incorporation may properly be made only by reference to a U.S. Patent or an ALLOWED U.S. application, as per MPEP § 608.01(p).

2. The disclosure is objected to because of the following informalities: Page 30 line 6 (i.e. line 4 of the Abstract) - the word "single" is apparently inaccurate, in that an adhesive tape is composed of at least two layers viz. a backing and an adhesive layer.

Appropriate correction is required.

3. Claims 38-39 and 44 (and claims dependent therefrom) and claim 63 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically (a) claim 38 line 4 - delete the term "each side adhesive layer" as being redundant (viz. with line 3) and therefore unnecessary; (b) claims 39 and 44 line 4 of each - delete the word "tape" and

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change "thermoset" to "thermosetting" or "thermosettable"; further, it is felt that the term "pressure sensitive" should also be deleted as being inaccurate i.e. if the adhesive must be activated by heating (as in line 5), then it is seen NOT to be pressure sensitive; and (c) claim 63 line 3 - no antecedent basis for "the carrier layer"; also, "having" should read "has".

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 34, 37-38 and 51-63 are rejected under 35 U.S.C. 102(e) and (b), respectively, as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either King or Bradley.

King (Fig. 1, Abstract, column 1 lines 11-12, column 2 lines 66-67, column 3 lines 1-8 and 14-32, column 4 lines 1-2 and 10-15) and Bradley (Fig. 2, Abstract, column 1 lines 14-15 and

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59-64, column 2 lines 4-12, column 3 lines 3-10) both disclose that it is known to attach/bond an electrical/electronic element to an organic (i.e. PCB) substrate utilizing a double sided low temperature/pressure sensitive adhesive tape.

6. Claims 35-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsukahara.

Tsukahara discloses a process most similar to those of King and Bradley wherein the adhesive employed in the double sided tape is composed of a mixture of thermoplastic and thermosetting resins. (Fig. 14, Abstract, column 8 line 37 thru column 9 line 5).

7. Claim 39 is further rejected under 35 U.S.C. 102(b) and (e), respectively, as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Baker et al. or Kotato et al.

Baker et al. (Fig. 1, column 5 line 42 thru column 6 line 33) and Kotato et al. (Abstract, column 1 lines 10-15, column 8 lines 56-62, column 9 lines 1-21) both disclose processes most similar to those of King, Bradley and Tsukahara wherein the adhesive employed in the double sided tape is (composed of) a thermosetting resin.

8. With ~~each~~ of the foregoing art rejections of paragraphs 5-7, all of the essential limitations of these claims

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are held to be satisfied by these respective references, any differences which might possibly exist between the envisioned, claimed inventions and the teachings of these respective references being held NOT to constitute patentable differences.

9. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 40-50 are further rejected under 35 U.S.C. § 103(a) as being unpatentable over either Baker et al. or Kotato et al. each in view of applicants' admission as to what constitutes prior art/the state of the art (hereinafter referred to as the prior art admission).

The prior art admission (N.B. page 1 lines 9-24 of applicants' specification) establishes that the various additional processing steps claimed (viz. wire bonding, resin encapsulation etc.) are known and conventional, such that it would have been obvious to one of ordinary skill in this art to employ any and/or all of these known, standard steps in/in

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conjunction with the respective processes of Baker et al. and Kotato et al., wherever deemed desirable and/or necessary.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. J. Gallagher whose telephone number is (703) 308-1971. The examiner can normally be reached on M-F from approximately 8:30 A.M. to 5 P.M. The examiner can also be reached on alternate N/A.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball, can be reached on (703) 308-2058. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661/0662.


JJGallagher:cdc

July 10, 2001


JOHN J. GALLAGHER
PRIMARY EXAMINER
ART UNIT 181, 733